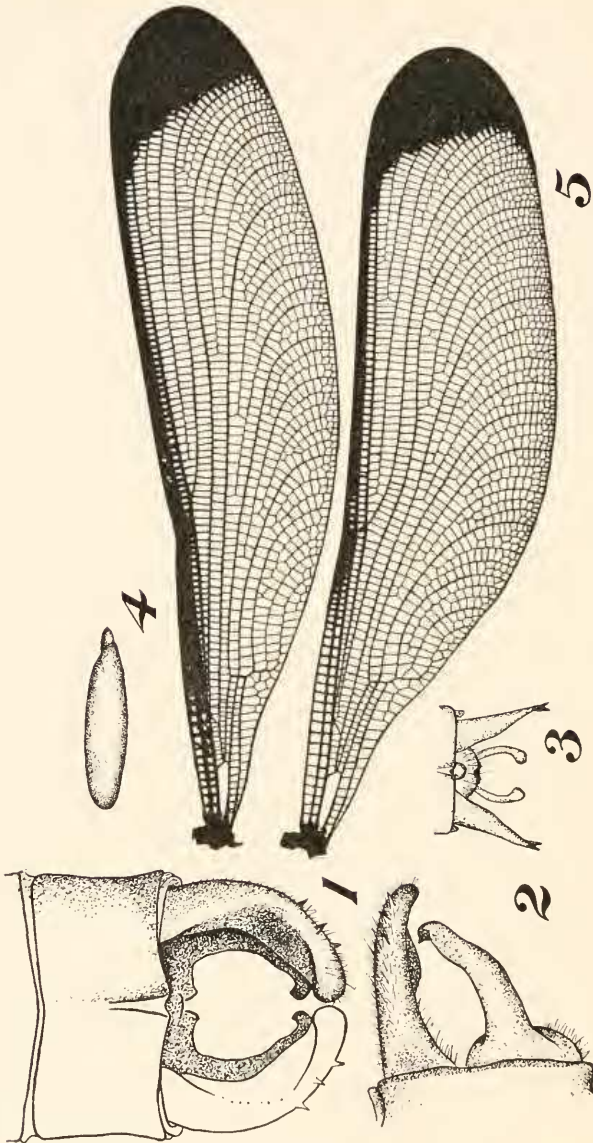


A new Species of *Psolodesmus* (order Odonata) from Formosa.

By E. B. WILLIAMSON.

Among some Odonates recently received from Rev. H. Loomis are specimens from Formosa of a large and beautiful species of *Psolodesmus*, of the subfamily Calopteryginæ, which seems to be new.

The genus *Psolodesmus* may be recognized as belonging to de Selys' Legion Calopteryx (exclusive of *Vestalis*) by the following characters: antenodals of the first and second series present, numerous, largely coinciding excepting possibly a few near the nodus; M_{1+2} rising abruptly upward from M_3 ; wings scarcely or not at all petioled; subquadrangle straight, not bent at the level of the arcus; basal space about equal to or shorter than the quadrangle; and a posterior branch of Cu_2 present. *Psolodesmus* is related to *Mnais* by the presence of a true stigma in both sexes; basal space free; arcus bent; M_{1+2} fused with the radius for a short distance; sectors not branched; posterior branch of Cu_2 not directed basally. From *Mnais*, *Psolodesmus* is distinguished by the more retracted nodus (in *Mnais* the distance to the nodus from the wing base is more than two-fifths the wing length, in *Psolodesmus* less than two-fifths the wing length, and in *Psolodesmus* in the front wings M_2 arises several cells beyond the subnodus, and not at the subnodus as in *Mnais*); by the more complex venation (secondary sectors and cross-veins more numerous in *Psolodesmus* than in *Mnais*); by the long and narrow quadrangle (in *Mnais* the quadrangle is scarcely as long as the basal space, in *Psolodesmus* it is about $1\frac{1}{2}$ times as long, and with about twice as many cross-veins as in *Mnais*); by the medio-anal link (*i. e.*, the vein closing the distal end of the quadrangle and subquadrangle) of the hind wings at right angles to the long axis of the wing or with the anterior end slightly more basal than the posterior end (in *Mnais* the posterior end of the medio-anal link is decidedly more basal than the anterior end); and by the hind margin of the wings, especially the hind wings, behind the subquadrangle, decidedly more concave.



Psolodesmus dorothea n. sp.

Figs. 1 and 2.—Abdominal appendages of ♂, dorsal and profile views.

Fig. 3.—Dorsal view of the appendages of ♀.

Fig. 4.—Egg; size $\frac{1}{2}$ mm. in length.

Fig. 5.—Wings of ♂.

***Psolodesmus dorothea* n. sp.**

Total length ♂ 70-71, ♀ 60-61; abdomen ♂ 58-59, ♀ 48-50; hind wing ♂ 45-46, ♀ 43-45; width of front wing ♂ and ♀ 12; stigma front wing ♂ 2.5, ♀ 2; last femur ♂ and ♀ 8; tibia and tarsus to end of tarsal claws ♂ and ♀ 10; length of longest cilia on legs ♂ and ♀ 2 + mm.

Head black, postclypeus metallic green, second joint of the antennæ pale greenish on the anterior side, longer than the inconspicuous first joint, eyes brown. Thorax and abdomen slender; thorax metallic green, middorsal carina and lateral sutures very narrowly, sides below and prothorax, black; legs black, pale basally especially on the inferior surface, where the pale area extends about half the length of the femora; cilia numerous and long.

♂. Pectus black, a sharply defined pale spot near the posterior border. Wings hyaline with violet and green reflections, apices for a distance of 5 mm. and stigma dark brown, the colored wing membrane with more brilliant reflections than the hyaline portions of the wings, coppery being most conspicuous; inner edge of brown area more or less concave; the dark brown or black of the wing apices extends basally more or less definitely along the anterior portion of the wings in the costal, subcostal and radial spaces, more heavily marked in the front wings where the color may extend quite to the wing base, doubtless variable with age. Antenodals front wings 33-37, hind wings 32; postnodals front wings 79-81, hind wings 71-75.

♀. Pectus pale, abdomen dark brown basally, shading posteriorly into black. Wings similar to the male, but with the brown on apices more extensive, 7 to 8 mm. in length, and the brown of the anterior margin less sharply defined; inner edge of brown apices nearly straight; stigma chalky white. Abdominal appendages slender, acute, as seen from the side about as long as segment 10; the extreme apex bi- or trifurcate.

Habitat—Formosa; 3 males and 2 females in my collection, all mature. Dr. Calvert has examined a ♂ and a ♀ and confirms my opinion as to the distinctness of the species. Named for my mother, Dorothea Kellerman Williamson.

The single hitherto known species of *Psolodesmus*, *mandarinus* McLachlan, originally described from a single imperfect ♂ from Amoy (Trans. Ent. Soc. Lond., p. 166, 1870) and later recorded and described from two males from Formosa by Hagen (C. R. Soc. Ent. Belg., xxiii, p. lxii, 1880), is at once distinguished from *dorothea* by the more extensive black on the wings (*mandarinus* has the apical fourth blackish brown) and the presence of a broad semi-opaque white band across the wings, no trace of which exists in *dorothea*. In coloration of wings *mandarinus* is described as somewhat suggest-

ing *Echo margarita*. *Dorothea* rather suggests the males of the species of *Calopteryx* of the *æquabilis* group, especially *dimidiata*, which species also were suggested to de Selys by *Vestalis apicalis*.

A New Species of *Ecitopora*.

BY CHARLES T. BRUES.

This is the third species of *Ecitopora* to be discovered in the United States living, like the other species of the genus, in the nests of the blind legionary ants, *Eciton*. The species can be readily distinguished by the accompanying figures.

Ecitopora nitidiventris sp. nov.

Length 2.25 mm. Pale fuscous. Head fuscous, with rather distinct sparse punctures. Thorax testaceous. Elytra testaceous, but appearing

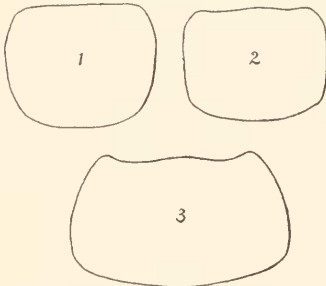


Fig. 1.—*Ecitopora nitidiventris* sp. nov.
Outline of prothorax.
Fig. 2.—*E. tenella* Wasm. Same.
Fig. 3.—*E. laticollis*. Same.

almost piceous in certain lights. Abdomen fuscous, lighter at apex and also at base, especially below. Legs pale testaceous. Antennæ thickened toward the tips; fuscous, paler at base; joints after the first, of about equal length, except the last, which is conical and a little longer than the two preceding joints; each of the latter one and three-fourths times as wide as long. Thorax slightly wider than long, narrowed slightly and broadly rounded behind; its lateral depressions deep and extending for its entire length; posteriorly there is a shallower median depression. Thorax and elytra sparsely golden pubescent. Abdomen bare, shining; each segment with a marginal row of about eight long hairs. Abdomen of equal width, rather suddenly obtusely acuminate at tip.

Described from two specimens collected in a nest of *Eciton coccum* Latr., at Austin, Texas, during March, 1902.

E. nitidiventris is readily distinguished from *E. laticollis* Brues by the form of the thorax, and from *E. tenella* Wasm. by the bare, nonpubescent, shining abdomen, which has fewer marginal hairs upon the dorsal segments.